



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address of COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20230
www.uspto.gov

| APPLICATION NO | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO | CONFIRMATION NO |
|----------------|-------------|----------------------|--------------------|-----------------|
| 09 987,003 | 11 13 2001 | Satoshi Seo | 740756-2389 | 6380 |

22204 7590 04 01 2003

NIXON PEABODY, LLP
8180 GREENSBORO DRIVE
SUITE 800
MCLEAN, VA 22102

EXAMINER

NEGRON, ISMAEL

ART UNIT PAPER NUMBER

2875

DATE MAILED: 04 01 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,003

Applicant(s)

SEO, SATOSHI

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4 6) ☐ Other _____

DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Electroluminescent Device having Drying Agent.**

Abstract

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. The abstract of the disclosure is objected to because it fails to adequately describe the claimed invention. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 12-15, 23-28, 36-41, 49-51 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawami et al. (U.S. Pat. 5,882,761) in view of Southwick, Jr. (U.S. Pat. 2,578,324).

Kawami et al. discloses an illumination device having;

- **a container sealed off from the atmosphere**, Figure 1, reference number 10;

Art Unit: 2875

- **an organic electroluminescent element (OELE) located in the container**, Figure 1, reference number 4;
- **a drying agent located in the container**, Figure 1, reference number 8;
- **the drying agent chemically absorbing moisture and maintaining its solid state after the moisture absorption**, column 4, lines 35-37;
- **the drying agent including one of an alkaline metal oxide and an alkaline-earth metal oxide**, column 4, lines 43-47;
- **the drying compound including sodium oxide (Na₂O)**, column 4, lines 48 and 49;
- **the drying compound including calcium oxide (CaO)**, column 4, line 51;
- **the container including a substrate formed separately from the OELE**, Figure 1, reference number 7;
- **the drying agent being in contact with the substrate**, Figure 1;
- **the container having a concave inner portion where the drying agent is contained**, Figure 1, reference number 11; and
- **the illumination device being incorporated into an OELE display device**, column 1, lines 6-9.

Kawami et al. discloses all the limitations of the claims, except the drying agent including a porous body with a porosity of 20% or more.

Southwick, Jr. discloses a drying pouch having a drying agent (Figure 3) contained inside a porous pouch (Figure 2), such porous pouch allowing the absorption of moisture at increased rates (column 1, lines 40-43).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include a porous member having a porosity of 20% or more, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only ordinary skill in the art. *In re Aller*, 105 USPQ 233. In this case Southwick discloses the advantages of containing the drying agent inside a porous membrane, such member having a relatively high moisture permeability (column 1, lines 27-29). Determining the specific permeability of such porous membrane would have flown naturally to one of ordinary skill in the art.

4. Claims 5-11, 16-22, 29-35, 42-48, 52-58 and 62-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawami et al. (U.S. Pat. 5,882,761) in view of Southwick, Jr. (U.S. Pat. 2,578,324).

The combined teachings of Kawami et al. and Southwick, Jr. disclose, or suggest in combination (see Section 3 of the instant Office Action) all the limitations of the claims, except the illumination device being incorporated in one of a video camera, a digital camera, an image reproduction apparatus, a portable computer, a mobile telephone, a personal computer and an acoustic equipment.

The examiner takes Official Notice that the use of OELE devices is old and well known in the illumination art. It would have been obvious to one of ordinary skill in the

Art Unit: 2875

art at the time the invention was made to use the OELE of Kawami et al. and Southwick, Jr. in one of the cited apparatus. One would have been motivated since OELE are recognized in the illumination art to have many desirable advantages, including reduced size and thickness, high efficiency, low power consumption, long life, resistance to vibrations, and low heat production, over other light sources. See Section 5 of the instant Office Action.

Relevant Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gary et al. (U.S. Pat. 2,548,780), **Adler** (U.S. Pat. 3,084,984), **Farrell et al.** (U.S. Pat., 425,410) and **Duggal** (U.S. Pat. 6,465,953) discloses drying agents contained inside porous layers.

Hiroataka et al. (U.S. Pat. 5,013,967), **Yamazaki** (U.S. Pat. 6,432,561) and **Yamazaki et al.** (U.S. Pat. 6,445,005) disclose organic display devices including drying agents for increasing the life of the device. Both Yamazaki and Yamazaki et al. specifically disclose the use of OELE in various electronics devices such as display monitors, video and digital cameras, audio equipment and computers .

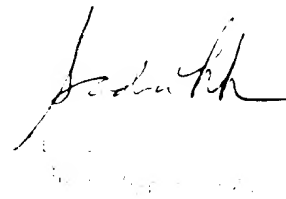
Art Unit: 2875

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (703) 308-6086. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (703) 305-4939. The facsimile machine number for the Art Group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Inr

March 20, 2003